

ABSTRACT

A method of forming a socket device for receiving a connection pin is disclosed, the socket device including a substrate having an upper surface. The socket device includes a connection pad disposed on the upper surface and a first layer disposed on the upper surface and on the connection pad. The first layer includes material having an overall positive coefficient of thermal expansion, and may be formed on the upper surface using conventional spin-on deposition techniques. The socket device includes a second layer disposed on the first layer. The second layer includes material having an overall negative coefficient of thermal expansion. The socket device also includes a contact aperture formed in the first and second layers using conventional techniques such as photolithography or laser drilling. The contact aperture exposes a portion of the connection pad such that a connection pin inserted into the aperture can contact the connection pad.